terrestrial repeaters typically operate in dense urban areas, where the direct line of sight (LOS) between the satellites and the mobile receiver can be blocked due to the angle of elevation and shadowing by tall buildings.

Please amend the paragraph beginning at page 2, line 1, as follows:

It has been observed that the communication channels in such satellite broadcasting systems, and in digital audio broadcasting systems generally, are often less dispersive in frequency than in time. Nonetheless, digital audio broadcasting systems typically differentially encode the transmitted signal over time. The European digital audio broadcasting standard, for example, set forth in "Radio Broadcasting Systems: Digital Audio Broadcasting (DAB) to Mobile, Portable and Fixed Receivers," European Telecommunications Standard: ETS 300 401 (May 1997), performs differential modulation over time. A need therefore exists for a terrestrial repeater that performs differential modulation over frequency. A further need exists for a terrestrial repeater that utilizes an orthogonal frequency division multiplexing scheme to implement differential encoding over frequency.

Please amend the paragraph beginning at page 5, line 5, as follows:

In the illustrative embodiment, each OFDM symbol of duration Ts will be composed of 978 active bins (sub-carriers) equally spaced, at a carrier spacing of 4 kHz (Δf). The duration of the symbol, Ts, is 266.11 mu-sec, where Ts equals Tu plus Tg. The useful OFDM symbol duration, Tu, illustratively equals 250 mu-sec and is, and the guard interval duration or cyclic prefix duration, Tg, illustratively equals 16.11 mu-sec. The inter-carrier spacing, Δf, of 4KHz is equal to the inverse of the useful symbol duration (1/Tu). The main signal is defined as follows:

$$s(t) = \mathrm{Re}\left\{\sum_{l=-\infty}^{\infty}\left(\sum_{k=-489}^{489} z(l,k)\times g(t-lTs,l,k) + \sum_{k=-511}^{-490} m(533+k)g(t-lTs,l,k) + \sum_{k=490}^{511} m(k-490)g(t-lTs,l,k)\right)\right\}$$

where z(*l*,k) equals the differentially coded complex symbol for to the kth sub-carrier in the *l*th OFDM symbol for k != 0 and 0 for k = 0; m(k) equals the complex TII information (transmitted only